AMENDMENT TO THE SPECIFICATION

Please replace the paragraph beginning at page 9, line 13 with the following rewritten paragraph:

The equalizer core 202 receives the input signal 220 from a transmission medium and generates a core output signal 222. The equalizer core 202 compensates for attenuation of the input signal 220 ~~signal 210~~ by applying an inverse loss function G(f) as described above with reference to Figs. 2-8. The equalizer core 202 also receives a gain control signal (Ki-Gain) 226 and a bandwidth control signal (Ki-BW) 228 from the AGC 206 that respectively control the gain and bandwidth of the inverse loss function G(f). The gain and bandwidth control signals 226 and 228 are described below in more detail with reference to Figs. 13-15. The core output signal 222 is then coupled to the slicer 204, which converts the equalized output 222 into a digital output signal 224 having a known swing that approximates the swing of the input signal 220 prior to its transmission. The AGC 206 compares the energy of the core output signal 222 with the energy of the digital output signal 224 to generate Ki-Gain 226 and Ki-BW 228, which are fed back to the equalizer core 202.